

METHOD AND APPARATUS FOR DEFINING APPLICATION SCOPE AND FOR ENSURING FINITE GROWTH OF SCALED DISTRIBUTED APPLICATIONS

5

ABSTRACT OF THE INVENTION

A system and method for incorporating "Application Responsibility Scope" for each distributed application in a million device installation using network topology. A distributed discovery engine is first used to discover the physical network and to define the physical scope per distributed network device. Thereafter, the logical network is created based on the physical network topology. Using the logical network, the application responsibility scope is defined for each application. Once application responsibility scopes have been defined, that information can be used to determine in runtime if an application has access to a particular endpoint. In the instance of a self-replicating program, the scope can be used to define and limit the span of control of endpoints at which the application can replicate itself.